

REMARKS

Claims 1-22 are all the claims pending in the application.

Statement of Substance of Interview

As an initial matter, Applicants thank the Examiner and the SPE for the courtesies extended during the interview conducted on November 19, 2007. During the interview, the Applicants' representative pointed out to the Examiner that the New reference does not disclose an address generator for generating a predetermined number of write addresses. The Examiner and the SPE suggested that this feature would be distinguishing over New if claimed more clearly. Accordingly, by this Amendment, Applicants amend independent claims 1, 11, 21, and 22 to recite, in some variation, that the number of write addresses is determined prior to the European digital audio broadcast receiver receiving the transmitted data. The arguments submitted below under the 'Claim Rejections - 35 U.S.C. § 103' section were discussed during the interview also.

The Examiner and the SPE agreed that such an amendment along with submission of the arguments would overcome the New reference (also see Interview Summary dated November 26, 2007). Thus, Applicants respectfully submit that the amendment and arguments made herein place the application in immediate condition for allowance, as discussed in further detail below with respect to the prior art rejection of the claims and as preliminarily agreed to by the Examiner and the SPE subject to further consideration and/or search.

It is respectfully submitted that the instant STATEMENT OF SUBSTANCE OF INTERVIEW complies with the requirements of 37 C.F.R. §§1.2 and 1.133 and MPEP §713.04.

Claim Rejections - 35 U.S.C. § 103

Claims 1 and 11

Claims 1 and 11 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 4,393,457 to New *et al.* (“New”) in view of U.S. Patent No. 5,633,817 to Verhenne *et al.* (“Verhenne”). For *at least* the following reasons, Applicants respectfully traverse the rejection.

Applicants respectfully submit that amended claim 1 is patentable over New and Verhenne. For example, amended claim 1 recites a digital audio broadcast receiver having diverse fast Fourier transform (FFT) modes based on sizes of transmitted data, comprising, *inter alia*, an address generator for generating a number of write addresses, wherein the number of write addresses is determined prior to the European digital audio broadcast receiver receiving the transmitted data. The Examiner contends that the data address generator 42 in FIG. 2 of New corresponds to the claimed address generator, and col. 3, lines 42-55 of New disclose all the features of the claimed address generator. As discussed during the interview, Applicants respectfully submit New does not disclose the above-noted feature of amended claim 1.

In the previous Amendment filed on August 7, 2007, it was submitted that the data address generator 42 does not generate a predetermined number of write addresses as set forth in claim 1. Specifically, it was submitted that the data address generator 42 generates address sequences based on outputs of the butterfly counter 40 and the latch 48 (New, figure 2). The butterfly counter 40 output (52) provides row and column position counts of the FFT to be performed (col. 6, lines 23-31). The output of the latch 48 is the length of the FFT to be transformed (col. 6, lines 46-57). Column 6, lines 60-67 of the New reference were also

reproduced to illustrate the dependency of the data address generator 42 on input values to
determine the number of addresses to generate.

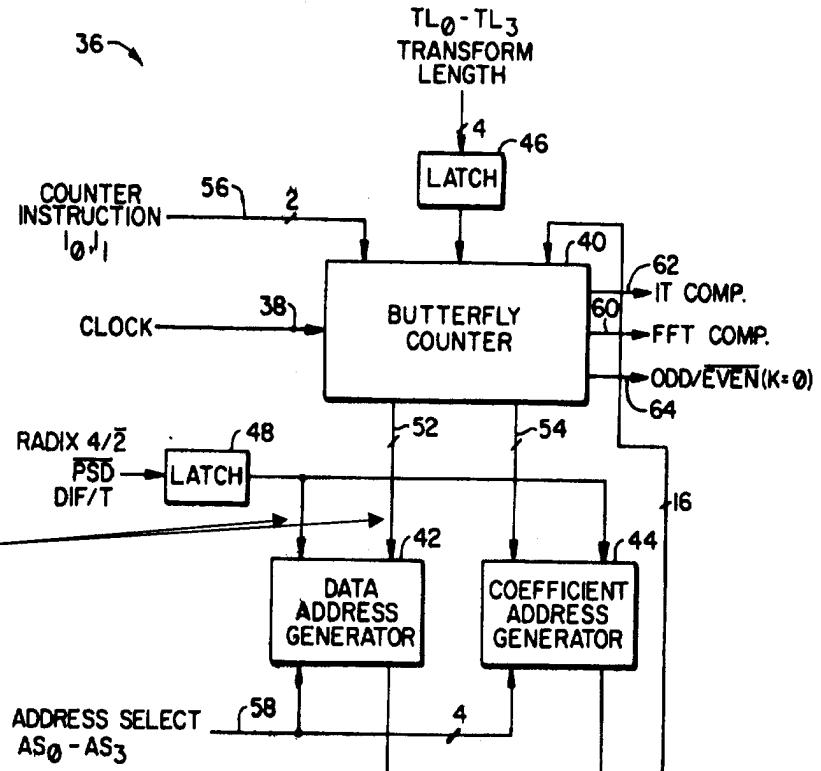
In response to these arguments, the Examiner asserts that “New clearly teaches an address sequencer (36) that generates all the addresses **needed** for memory operation of a fast Fourier transform of a preselected length (Col. 3, lines 50-55). Which is considered as the same described by the instant application. The memory operation can be write or read, the length is considered as the size of the data as described by the instant application” (Office Action, page 2, emphasis added). Applicants respectfully submit that the Examiner is misinterpreting the teachings of New in an attempt to transform New’s data address generator 42 into the claimed address generator.

The Examiner himself acknowledges that the address sequencer 36 does not generate a predetermined number of write addresses. For instance, as noted above, the Examiner states that the address sequencer 36 generates all the **needed** addresses. Clearly, the address sequencer 36 would have to **determine** what the number of **needed** addresses is. Based on this point alone, Applicants submit that claim 1 is patentable over the combination of New and Verhenne.

Additionally, the Examiner appears to be interpreting the addresses of a preselected length as generating a predetermined number of write addresses. Applicants respectfully submit that generating an address of a **preselected length** does not disclose or suggest that **the number of write addresses in New is determined prior to the receiver receiving the transmitted data.** Merely because a length of an address that is being generated by the data address generator 42 is preselected does not imply that **the number of addresses generated** by the data address generator 42 is **determined prior to receiving the transmitted data.** New does not disclose such a feature. Moreover, Applicants respectfully submit that an annotated version of FIG. 2 in

New, which is reproduced below, highlights this deficiency.

As shown, the output of the data address generator 42 is dependent on input from the butterfly counter 40 and the latch 48. New states that the address sequencer 36 receives "a set of instructions and parameters about the fast Fourier transform to be processed" and generates all of the addresses needed for memory operations of a fast Fourier transform of a preselected length (New, col. 3, lines 50-55). That is, the number of addresses needed is determined based on the output (52) of the butterfly counter 40 and the output of the latch 48. In col. 6, lines 60-67 and col. 7, lines 14-29, New also discloses that the output of the data address generator is dependent on these inputs and thus cannot be determined prior to receiving the transmitted data.



As discussed and illustrated above, Applicants respectfully submit that New does not disclose, teach, or suggest the claimed data generator. Therefore, Applicants respectfully submit that claim 1 is patentable over New and Verhenne. Accordingly, Applicants respectfully request the Examiner to withdraw the 35 U.S.C. § 103(a) rejection.

Claim 11 recites features similar to those discussed above with respect to claim 1, i.e., claim 11 recites an operation method for a digital audio broadcast receiver comprising, *inter alia*, generating a number of write addresses, wherein the number of write addresses is determined prior to the European digital audio broadcast receiver receiving the transmitted data. Therefore,

Applicants respectfully submit that claim 11 is patentable over New and Verhenne for *at least* reasons similar to those given above with respect to claim 1.

Claims 2, 3, 6-10, 12, 13, and 16-20

Claims 2, 3, 6-10, 12, 13, and 16-20 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over New in view of Verhenne, and further in view of U.S. Patent No. 7,010,027 to Mestdagh *et al.* (“Mestdagh”)¹. For *at least* the following reasons, Applicants respectfully traverse the rejection.

Claims 2, 3, 6-10, 12, 13, and 16-20 depend from independent claims 1 and 11. Since Mestdagh does not cure the deficient teachings of New and Verhenne with respect to claims 1 and 11. Therefore, claims 2, 3, 6-10, 12, 13, and 16-20 are patentable *at least* by virtue of their dependency.

Claims 4, 5, 14, and 15

Claims 4, 5, 14, and 15 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over New in view of Mestdagh, and further in view of “On computing the fast Fourier transform” by Richard C. Singleton (“Singleton”). For *at least* the following reasons, Applicants respectfully traverse the rejection.

As an initial matter, Applicants again point out to the Examiner that claims 4-5 and 14-15 depend on claims 3 and 13, respectively. Claims 3 and 13 were rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over New, Verhenne, and Mestdagh.

Verhenne is not cited in rejected claims 4, 5, 14, and 15. The Examiner admitted that combination of New and Mestdagh, by itself, does not disclose all the features of the claims from

¹ As previously noted, the Mestdagh reference was cited in the IDS filed on September 5, 2006.

which claims 4, 5, 14, and 15 depend. Therefore, Applicants submit that the rejection is **improper.**

Nonetheless, Applicants submit that since claims 4, 5, 14, and 15 depend on claims 1 and 11, and since Singleton does not cure the deficient teachings of New and Mestdagh with respect to claims 1 and 11, claims 4, 5, 14, and 15 are patentable *at least* by virtue of their dependency.

Claims 21-22

Applicants respectfully submit to the Examiner that it is unclear on what basis claims 21-22 are rejected under. There is no statement of rejection in the Office Action that addresses these claims. However, the Examiner appears to rely solely on New to reject these claims on pages 8-9 of the Office Action. **Applicants respectfully request clarification on this point from the Examiner.**

Applicants submit that since claims 21-22 recite features similar to those discussed above with respect to claim 1. Therefore, they are patentable for *at least* reasons similar to those given above with respect to claim 1. Applicants also submit that claims 21-22 are patentable for additional reasons as discussed below.

For example, claims 21-22 recite implementing “a fast Fourier transform using the generated first number of data”. Under the rejection of claim 1, the Examiner admits that New does not disclose this feature (Office Action, page 4, “But new fails to explicitly disclose the implementing of the fast Fourier transform by using the predetermined number”). However, in rejecting claims 21-22, the Examiner incorrectly contends that New discloses this feature (Office Action, last line of page 8 to first line of page 9).

Moreover, claims 21-22 recite processing the received data through fast Fourier transform modes to generate a first number of data **corresponding to the generated**

predetermined number of write addresses. The Examiner contends that that the first seed number, as described in col. 1, lines 65-66, col. 2, line 67 - col. 3, line 2, and col. 3, lines 50-55 discloses the “first number of data”. Applicants respectfully disagree.

The seed number referred to in the Office Action is the unmodified row position count outputted by the butterfly counter 40. The unmodified row position count (the seed number) is the output 52 of the butterfly counter 40 that is received by the data address generator 42. The data address generator 42, as discussed above, generates an address *at least* based on this seed value. On the other hand, claims 21-22 recite that **the first number of data corresponds to the generated predetermined number of write addresses.** That is, from the claim language, it is inherent that the predetermined number of write addresses are generated **prior** to generating the first number of data. On the other hand, in New, the seed value (allegedly the first number of data) is generated **first** by the butterfly counter 40, **and then**, the data address generator 42 generates an address. Thus the addresses are generated **after** the seed value is generated in New.

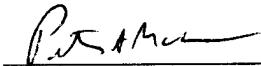
Therefore, New does not adequately disclose, teach, or suggest all the interrelationships between the above-noted features of claims 21-22 . Accordingly, Applicants respectfully request the Examiner to withdraw the rejection of claims 21-22.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Peter A. McKenna
Registration No. 38,551

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

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